

SPHAERODOTHIS, A NEW GENUS OF DOTHIDIACEOUS FUNGI

C. L. SHEAR

Sphaerodothis is the name proposed by Saccardo and Sydow in Sylloge Fungorum 16: 625. 1902, for a subgenus of *Auerswaldia* to include the single species *Auerswaldia arengae* Rac. Par. Alg. and Pilze Java 3: 27. 1900. The principal character used in separating this subgenus from the genus *Auerswaldia* of Saccardo was the shape of the spores which are spherical or subspherical. The genus *Auerswaldia* Sacc. is, however, untenable, being a homonym of *Auerswaldia* Rabenh., Hedwigia 1: 116. t. 15. f. 2. 1857. Rabenhorst's genus was monotypic, being based on *Sphaeria lagenaria* Pers., which belongs to the earlier genus *Melanospora* Corda, Ic. Fung. 1: 24. t. 7. f. 297. 1837. *Auerswaldia* Rabenh. and *Melanospora* Corda are, therefore, to be regarded as synonyms. Or if it should be maintained that *Sphaeria lagenaria*, the type of *Auerswaldia* Rabenh., is sufficiently different from the type of *Melanospora* to justify a separate genus, such a genus could hardly be made to include the species which Saccardo has referred to his *Auerswaldia*, as they have little in common with *Sphaeria lagenaria* except the continuous brown spores. *Auerswaldia lagenaria* (Pers.) Rabenh. is a hypocreaceous fungus, whereas *A. arengae* Rac. and most of the species included by Saccardo in his *Auerswaldia* are dothideaceous fungi. None of the species congeneric with *A. arengae* Rac. has a tenable generic name at present so far as we have been able to discover, unless some of the older names of pycnidial forms should prove to belong here. There is a possibility that *Lasmenia* of Spegazzini, published in Anal. Soc. Ci. Argent. 22: 199. 1886, may have been based in part on an old specimen of one of these fungi in which the fugacious asci had disappeared and only the free ascospores remained.

The recent discovery of an apparently undescribed species, evidently congeneric with *Auerswaldia arengae* Rac., the type of the subgenus *Sphaerodothis* has led the writer, for want of a tenable

generic name for the new species, to raise *Sphaerodothis* to generic rank and to transfer to it some of the closely related species which seem to have, at present, no valid generic appellation.

Sphaerodothis gen. nov.

Sphaerodothis sub. gen. Sacc. & Syd., Syll. Fung. 16: 625. 1902.

The type of the genus is *Auerswaldia Arengae* Rac., which was the monotype of the subgenus of Saccardo and Sydow *l. c.*

Sphaerodothis Neowashingtoniae sp. nov.

Stromata amphigenous, numerous, scattered, subelliptical in outline, irregularly depressed or somewhat collapsed, black, shining, minutely punctate under a lens, 3–8 mm. long, frequently seated on yellowish-brown spots; locules (ascogenous cells) numerous, small, ovate or oblong; ostioles few or wanting, umbilicate; asci fugacious, globose or subglobose, sessile or subsessile, 8-spored, 100–120 μ diam.; paraphyses apparently wanting; spores oblong-elliptic, smooth, somewhat flattened on one side and with a narrow oblong longitudinal depression in the middle, suggesting in appearance a date seed, hyaline at first and enveloped in a thick mucous layer which disappears at maturity when the spores become a deep chestnut brown, 56–68 \times 30–36 μ . Free, mature spores frequently collapse, becoming saddle-shaped.

On leaves of *Neowashingtonia filamentosa*, National City, Cal., Jan. 7, 1907, C. O. Smith Coll. Type, No. 1572, C. L. Shear, in Herb. Dept. Agriculture.

This species appears to be readily distinguished from all others described by the large size and peculiar shape of its spores.

The following species belong to the same genus and should be transferred to it:

Sphaerodothis Chamaeropsis (Cke.) comb. nov.

Auerswaldia Chamaeropsis (Cke.) Sacc. Syll. Fung. 2: 626. 1883.

Dothidea Champaeropsidis Cke. Grevillea 7: 96. 1879.

Sphaerodothis palmicola (Speg.) comb. nov.

Auerswaldia palmicola Speg. Anal. Soc. Ci. Argent. 19: 247. 1885.

Sphaerodothis rimosa (Speg.) comb. nov.

Auerswaldia rimosa Speg. Anal. Soc. Ci. Argent. 26: 43. 1888.

Sphaerodothis densa (Bomm. & Rouss.) comb. nov.

Auerswaldia densa Bomm. & Rouss. Bull. Soc. Bot. Belg. 35:
162. 1896.

Sphaerodothis Guilielmae (Henn.) comb. nov.

Auerswaldia Guilielmae Henn. Hedwigia Beibl. 39: (78).
1900.

WASHINGTON, D. C.